

RECEIVED
CENTRAL FAX CENTER

SEP 27 2006

Claims

Claims 1-30 (cancelled).

Claim 31 (original): A method of forming a PMOS device and an NMOS device, comprising:

providing substrate comprising a PMOS gate region and an NMOS gate region;

forming a gate dielectric layer over the PMOS and NMOS gate regions of the substrate;

forming a thick metal-containing material to be over the PMOS gate region and not over the NMOS gate region, the thick metal-containing material being formed to a thickness of greater than 20Å;

forming a thin metal-containing material to be over the PMOS and NMOS gate regions, the thin metal-containing material being formed to a thickness of less than or equal to about 20Å and being formed over the thick metal-containing material over the PMOS gate region;

forming a layer of conductively-doped silicon extending across the PMOS and NMOS gate regions and over the thin metal-containing material;

incorporating the thick metal-containing material, thin metal-containing material and conductively-doped silicon into a PMOS transistor gate stack over the PMOS gate region; and

incorporating the thin metal-containing material and conductively-doped silicon into an NMOS transistor gate stack over the NMOS gate region.

S:\M22\2467\M08.DOC A2709251044N

2

PAT-USIAM-NEW/RULES.wpd

BEST AVAILABLE COPY

Copied from 10572253 on 11/29/2006

Claim 32 (original): The method of claim 31 wherein the conductively-doped silicon is majority n-type doped.

Claim 33 (currently amended): The method of claim 31 wherein the gate dielectric layer comprises ~~one or more~~ at least one of tantalum, hafnium and aluminum.

Claim 34 (original): The method of claim 31 wherein the gate dielectric layer comprises aluminum oxide over silicon dioxide.

Claim 35 (currently amended): The method of claim 31 wherein the thin metal-containing material comprises ~~one or more~~ at least one of titanium nitride, tantalum nitride, hafnium nitride and tungsten nitride.

Claim 36 (currently amended): The method of claim 31 wherein the thin metal-containing material comprises ~~one or more~~ at least one of titanium silicide, tantalum silicide, hafnium silicide and tungsten silicide.

Claim 37 (currently amended): The method of claim 31 wherein the metal of the thin metal-containing material predominately comprises ~~one or more~~ at least one of titanium, tantalum, tungsten and hafnium.

Claim 38 (original): The method of claim 31 wherein the thickness of the thin metal-containing material is less than or equal to about 15Å.

Claim 39 (previously presented): The method of claim 31 wherein the thickness of the thin metal-containing material is less than or equal to about 10Å.

Claim 40 (cancelled).

Claim 41 (previously presented): The method of claim 44 wherein the conductively-doped silicon is majority n-type doped.

Claim 42 (currently amended): The method of claim 44 wherein the dielectric layer comprises ~~one or more~~ at least one of tantalum, hafnium and aluminum.

Claim 43 (cancelled).

Claim 44 (currently amended): A method of forming a capacitor construction, comprising:

- forming a dielectric layer over a capacitor storage node;
- forming a metal-containing material over the dielectric layer, the metal-containing material being formed with less than or equal to about 70 ALD cycles;
- forming conductively-doped silicon over the metal-containing material; and
- wherein the metal-containing material comprises ~~one or more~~ at least one of titanium silicide, tantalum silicide, hafnium silicide and tungsten silicide.

Claim 45 (cancelled).

Claim 46 (previously presented): The method of claim 44 wherein the metal-containing material has a thickness of less than or equal to about 20Å.

Claim 47 (previously presented): The method of claim 44 wherein the metal-containing material has a thickness of less than or equal to about 15Å.

Claim 48 (previously presented): The method of claim 44 wherein the metal-containing material has a thickness of less than or equal to about 10Å.

Claim 49 (cancelled).

Claim 50 (previously presented): The method of claim 55 wherein the conductively-doped silicon is majority n-type doped.

Claim 51 (currently amended): The method of claim 55 wherein the dielectric layer comprises ~~one or more~~ at least one of tantalum, hafnium and aluminum.

Claim 52 (previously presented): The method of claim 55 wherein the dielectric layer comprises aluminum oxide.

Claim 53 (cancelled).

Claim 54 (cancelled).

Claim 55 (currently amended): A method of forming a capacitor construction, comprising:
forming a capacitor electrode comprising conductively-doped silicon;
providing a metal-containing material between the capacitor electrode and a capacitor dielectric layer, the metal-containing material having a thickness of no more than about 20Å; and

wherein the metal-containing material comprises ~~one or more~~ at least one of titanium silicide, tantalum silicide, hafnium silicide and tungsten silicide.

Claim 56 (previously presented): The method of claim 55 wherein the thickness of the metal-containing material is less than or equal to about 15Å.

Claim 57 (previously presented): The method of claim 55 wherein the thickness of the metal-containing material is less than or equal to about 10Å.

Claims 58-94 (cancelled).